



## USB Multilink Universal FX: A High-Speed, All-In-One Development Interface

*Extremely Fast & Versatile*

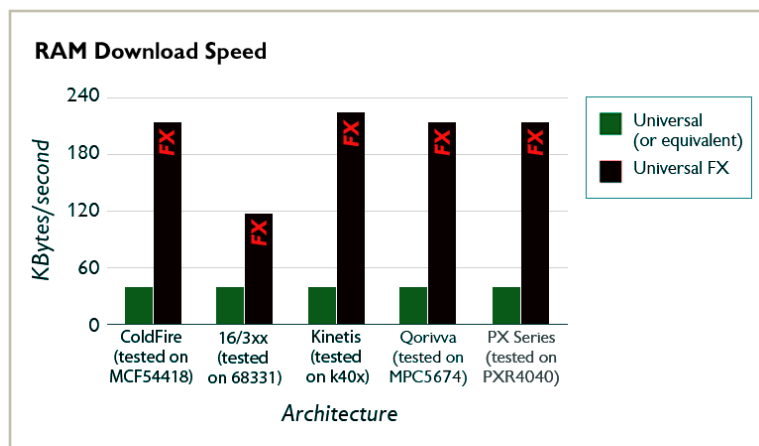
### Overview

P&E's **USB Multilink Universal FX** is the latest **high-speed** addition to P&E's successful line of USB Multilink hardware interfaces. It combines support, in a single interface, for many Freescale architectures, including: **Kinetis®**, **Qorivva® MPC55xx/56xx**, **Power Architecture® PX series**, **ColdFire+® V1/ColdFire V1**, **ColdFire V2/3/4**, **HCS08**, **HC(S)12(X)**, **S12Z**, **DSC**, and **HC16/683xx**. It includes all the features of the USB Multilink Universal, plus these additional benefits:

- **Lightning fast! Up to 10X faster communications speed than the USB Multilink Universal\***
- **Can provide power to the target MCU**
- **I/O line clamping for added protection**
- **Supports additional Freescale devices**

\*The exceptional performance increases seen with the USB Multilink Universal FX are limited to synchronous architectures: Kinetis, Qorivva, Coldfire V2-V4, Power Architecture PX Series, DSC, HC16/683xx.

The USB Multilink Universal FX is an easy-to-use debug and programming interface which allows the PC to communicate with a target processor through a high-speed USB interface to the PC. It controls the microprocessor by accessing the debug port of the target. The Multilink is able to accommodate



communications with a variety of Freescale MCUs by featuring multiple headers, which can be accessed by simply flipping open the plastic case. Ribbon cables for the supported MCUs are conveniently included.

### Development Solutions

The USB Multilink Universal FX's exceptional speed and reliability make it ideal for development. It is natively supported by recent versions of CodeWarrior® (10.x), current P&E software applications, and toolchains from many Freescale partners including Keil, Cosmic, and Green Hills (check with vendor for device compatibility).

More information on the USB Multilink Universal FX is available at: [www.pemicro.com/universal](http://www.pemicro.com/universal).

### Target Architectures

- Kinetis®
- Qorivva® MPC55xx/56xx
- Power Architecture® PX series
- ColdFire® +V1/ColdFire V1
- ColdFire V2/3/4
- HCS08
- RS08
- HC(S)12(X)
- S12Z
- DSC
- HC16/683xx

### Applications

- Development/Prototyping

### Hardware Features

- Very high-speed, hassle-free USB 2.0 communications interface
- Can provide power to target MCU
- Draws power directly from the USB port – no external power supply needed
- Multi-voltage support for targets ranging from 1.6 to 5.25 Volts
- I/O line clamping for added protection
- Includes ribbon cables for supported architectures
- Compact size